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11
12 **UNITED STATES DISTRICT COURT**
13
14 **NORTHERN DISTRICT OF CALIFORNIA**
15
16 **SAN FRANCISCO DIVISION**

17 MAXIMILIAN KLEIN, et al.,
18
19 Plaintiffs,

20 vs.
21
22 META PLATFORMS, INC.,
23
24 Defendant.

25 This Document Relates To: All Consumer
26 Actions

27 Consolidated Case No. 3:20-cv-08570-JD
28

**CONSUMER PLAINTIFFS' NOTICE OF
MOTION AND RENEWED MOTION TO
EXCLUDE PORTIONS OF DR. DENNIS
CARLTON'S PROPOSED TESTIMONY**

The Hon. James Donato

REDACTED VERSION FILED PUBLICLY

NOTICE OF MOTION AND MOTION

PLEASE TAKE NOTICE that on a date and time to be set by the Court, before the Honorable James Donato, of the United States District Court of the Northern District of California, San Francisco Division, 450 Golden Gate Avenue, San Francisco, California, Courtroom 11, 19th Floor, Plaintiffs Maximillian Klein, Sarah Grabert, and Rachel Banks Kupcho (“Consumers”), on behalf of themselves and all others similarly situated, hereby move the Court for an order excluding portions of the merits expert reports and testimony of Dr. Dennis Carlton.¹

This motion is based upon this Notice of Motion, the accompanying Memorandum of Points and Authorities, all filed supportive declarations and exhibits, the records, pleadings, and other documents on file in this consolidated action, and any argument that may be presented to the Court.

¹ Consumers previously moved to exclude certain opinions from another of Facebook’s merits experts—Dr. Anindya Ghose—related to the *Brown Shoe* factors, market definition, and monopoly power. See Dkt. 778. Consumers understand that Facebook’s proffer of Dr. Ghose is conditional on whether the Court allows testimony from Consumers’ expert Professor Lamdan, and that to the extent the Court does allow testimony from Dr. Ghose, Facebook no longer intends to offer the challenged testimony from Dr. Ghose regarding *Brown Shoe* factors, market definition, or monopoly power. See Dkt. 822 at 5–7. To the extent that Facebook does actually offer such opinions from Dr. Ghose, Consumers reserve their rights, including to seek to exclude or otherwise challenge those opinions.

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STATEMENT OF ISSUES TO BE DECIDED

The issues to be decided with respect to Consumers' Motion are:

1. Should this Court exclude Dr. Carlton’s testimony regarding Meta’s October 2021 service outage where:
 - a. the results of a fleeting, seven-hour service outage do not provide reliable measures of long-run substitution, which is the type of substitution that economists evaluate for market definition purposes; and
 - b. Dr. Carlton admits that his outage analysis does not control for the *Cellophane* fallacy, and he provides only *ipse dixit* assertions that the fallacy does not invalidate his analysis?
2. Should this Court exclude Dr. Carlton’s testimony regarding friends and family usage on Facebook where:
 - a. Dr. Carlton blindly relies on data whose reliability he admits he did not independently verify even though Facebook [REDACTED] [REDACTED]; and
 - b. Dr. Carlton relies on information that Facebook failed to disclose in violation of Rule 26 and that should therefore be excluded as a sanction under Rule 37?
3. Should this Court exclude Dr. Carlton’s testimony that TikTok, YouTube, Twitter, and messaging apps must be included in the relevant market if Snapchat is, and Dr. Carlton’s resulting market share calculations, where:
 - a. Dr. Carlton’s opinion relies on diversion ratios from his outage analysis and from Dr. List’s analyses, all of which should be excluded; and
 - b. Dr. Carlton’s opinion relies on the Circle Principle, a rejected methodology that Dr. Carlton himself applies selectively?
4. Should this Court exclude Dr. Carlton’s testimony that competition may [REDACTED] [REDACTED], where such an argument that “competition is bad” is contrary to decades of law and forbidden as a matter of law?

MEMORANDUM OF POINTS AND AUTHORITIES

I. INTRODUCTION

Dr. Dennis Carlton is one of Facebook's economist experts who offers liability and relevant market opinions. Certain of Dr. Carlton's opinions are unreliable and unhelpful to the fact finder, and they should be excluded.

6 *First*, Dr. Carlton purports to critique Consumers' proffered Personal Social Network Market
7 based on the results of a fleeting, seven-hour service outage (Section IV.C.2 of his opening merits
8 report). But, by its very nature, his outage analysis does not measure ***long-run substitution***, which is
9 what economists evaluate for market definition purposes. The conclusions Dr. Carlton draws from
10 his outage analysis therefore do not rely on any sort of well-accepted methodology. Moreover, while
11 Dr. Carlton acknowledges the well-accepted *Cellophane* fallacy, he admits that his outage analysis
12 cannot and does not control for its potential effects; his assertion that the fallacy does not
13 meaningfully affect his results is *ipse dixit*.

14 **Second**, Dr. Carlton opines that “friends and family usage” reflects a “minority” of the time
15 that users spend on Facebook (Section IV.B.1 of his opening merits report), but bases that opinion on
16 two months of data pulled from a single file Facebook provided and [REDACTED]

17 [REDACTED] He nevertheless blindly assumed, but did not verify, the data he used did not suffer
18 from the same problem; he also admits that even the months he did look at contained unreliable data.
19 Dr. Carlton’s opinion should also be excluded under Rule 37 because it relies on information from
20 Facebook—how the data should be interpreted, and explanations of [REDACTED]
21 [REDACTED]—that neither Facebook nor he ever disclosed in violation of Rule 26.

22 **Third**, Dr. Carlton opines that TikTok, YouTube, Twitter, and various messaging apps are
23 “closer” substitutes to Facebook than Snapchat and should therefore be included in the relevant
24 market if Snapchat is, which supposedly means Facebook lacks monopoly power (Section V.A.I. of
25 his opening report). But, his sole basis for these opinions is the unreliable and unhelpful outage
26 analysis discussed above, as well as Dr. List’s analyses, which should be excluded for the reasons set
27 forth in Consumers’ contemporaneously-filed *Daubert* motion. Dr. Carlton thus has no basis to assert
28 these products should be in the relevant market nor to calculate market shares based on that

1 assumption. Separately, this opinion is based on the “Circle Principle,” a methodology rejected by
 2 U.S. competition authorities’ Merger Guidelines and Facebook’s own expert Dr. List, the limitations
 3 of which Dr. Carlton himself recognizes, and that Dr. Carlton applies selectively.

4 ***Finally***, Dr. Carlton opines that more competition may [REDACTED]
 5 [REDACTED] for users (Section III.A.3. of his opening report). This, however, is a poorly-disguised
 6 argument that “more competition is bad,” which is contrary to decades of law and the U.S. Supreme
 7 Court’s directive that a defendant may not make such arguments as a matter of law.

8 **II. BACKGROUND**

9 Dr. Carlton is an economist that has appeared multiple times for Facebook in antitrust cases.
 10 Ex. 2 (Carlton Tr.) at 140:10–141:1. He offers no affirmative definition of the relevant market. *Id.* at
 11 16:7–24, 18:5–19:17. Instead, he argues that Consumers’ proffered PSN Market—consisting of
 12 Facebook, Instagram, Snapchat, MeWe, and other now-defunct products from Myspace, Friendster,
 13 and Orkut—should include other types of products. *Id.* at 19:2–13. To do so, he offers four primary
 14 opinions and analyses—the substance of which is summarized below, and the problems of which are
 15 discussed in the Argument section.

16 ***Outage Analysis.*** On October 4, 2021, all of Meta’s apps—including (among others)
 17 Facebook, Instagram, WhatsApp, Messenger, and Viewpoints—were subject to a global service
 18 outage for nearly seven hours. Ex. 1 (Carlton Rep.) ¶ 117. Based on data from a sample of Google
 19 Android device users, Dr. Carlton [REDACTED]

20 [REDACTED]² *Id.* ¶ 120. He asserts that when Meta’s apps went down, various
 21 apps outside Consumers’ PSN Market—TikTok, YouTube, the Samsung and Google Messages apps,
 22 the Google Chrome web browser, Twitter, and the Samsung One UI Home user interface—all gained
 23 more time than did Snapchat (which is in Consumers’ PSN Market). *Id.* ¶ 120, Table 9.

24 ***Friends and Family Usage on Facebook.*** Consumers assert that connecting with friends and
 25 family is the core use case for personal social networks like Facebook and differentiates firms in the
 26 PSN Market from other types of services that are outside the market. Ex. 1 (Carlton Rep.) ¶ 81. Based
 27

28 ² Dr. Carlton [REDACTED]

Ex. 2 (Carlton Tr.) at 113:18–23, 114:14–20.

1 on post-Class Period data from Facebook for June 2022 and January 2023, Dr. Carlton purports to
 2 evaluate Consumers' assertion by purporting to analyze what portion of time and content on Facebook
 3 constitutes "friends and family" sharing. Ex. 1 (Carlton Rep.) ¶ 88, Table 6.

4 **Relevant Market and Market Share Calculations.** Dr. Carlton opines that if, as Consumers
 5 assert, Snapchat is in the relevant market, then other apps that are "closer" substitutes to Facebook
 6 and Instagram than Snapchat must be included in the relevant market as well. Ex. 1 (Carlton Rep.) ¶¶
 7 121, 144–45. Based on diversion ratios from his outage analysis and Dr. List's analyses, Dr. Carlton
 8 opines that YouTube, TikTok, Twitter, and messaging apps [REDACTED]

9 [REDACTED] *Id.* Dr.
 10 Carlton then [REDACTED] various scenarios
 11 incorporating these other apps in the market. He opines that [REDACTED]

12 [REDACTED]
 13 [REDACTED]
 14 [REDACTED]
 15 [REDACTED]
 16 [REDACTED]
 17 [REDACTED] Ex. 2 (Carlton Tr.) at 213:17–214:5, 222:9–223:1; Ex. 1 (Carlton Rep.) ¶ 148, Table 12.

18 **Deception, Privacy, and Competition.** Dr. Carlton opines that while deception [REDACTED]
 19 [REDACTED]
 20 [REDACTED] Ex. 1 (Carlton Rep.) ¶¶ 8, 25, 28–30.

21 **III. LEGAL STANDARDS**

22 Under *Daubert* and Federal Rule of Evidence 702, the trial court acts as a gatekeeper to ensure
 23 that expert testimony "rests on a reliable foundation and is relevant to the task at hand." *Daubert v.*
 24 *Merrell Dow Pharm., Inc.*, 509 U.S. 579, 597 (1993); *Kumho Tire Co. v. Carmichael*, 526 U.S. 137,
 25 152 (1999); *Ellis v. Costco Wholesale Corp.*, 657 F.3d 970, 982 (9th Cir. 2011). The relevance
 26 requirement asks whether the evidence is a "fit" with the issues to be decided, and whether it tends to
 27 help the trier of fact understand or determine a fact in issue. *Daubert*, 509 U.S. at 591; *United States*
 28 *v. Sandoval-Mendoza*, 472 F.3d 645, 654 (9th Cir. 2006). "In assessing the relevance or 'fit' of expert

1 testimony, ‘scientific validity for one purpose is not necessarily scientific validity for other, unrelated
 2 purposes.’’’ *In re Nat’l Collegiate Athletic Ass’n Athletic Grant-in-Aid Cap Antitrust Litig.*, 2018 WL
 3 1948593, at *2 (N.D. Cal. Apr. 25, 2018). The reliability requirement asks whether the reasoning or
 4 methodology underlying the testimony is scientifically valid. *Murray v. S. Route Maritime SA*, 870
 5 F.3d 915, 922 (9th Cir. 2017). The proponent of expert testimony has the burden to establish by a
 6 preponderance of the evidence that the testimony meets all of these requirements. *Daubert*, 509 U.S.
 7 at 592 n.10; *accord Bldg. Indus. Ass’n of Wash. v. Wash. State Bldg. Code Council*, 683 F.3d 1144,
 8 1154 (9th Cir. 2012).

9 **IV. ARGUMENT**

10 **A. Dr. Carlton’s Outage Analysis Is Unreliable**

11 Dr. Carlton’s outage analysis should be excluded first because it fails to measure long-term
 12 substitution—what economists evaluate to define a market. Separately, Dr. Carlton’s outage analysis
 13 is subject to the *Cellophane* fallacy, for which he admittedly did not control, and in response to which
 14 he offers only *ipse dixit* assumptions that he did not test and are based on zero literature.

15 **1. Dr. Carlton Fails to Reliably Measure Long-Term Substitution**

16 Dr. Carlton’s outage analysis should be excluded since it is based on a fleeting, seven-hour
 17 service outage that occurred over part of a single day of a single year. Ex. 1 (Carlton Rep.) ¶¶ 117,
 18 117 n. 188. As Dr. Carlton explains, [REDACTED]

19 [REDACTED]
 20 [REDACTED] Ex. 2 (Carlton Tr.) at 24:11–23. For market definition purposes,
 21 however, economic literature explains that economists seek to identify the substitutes to which
 22 consumers turn over the *long-term* when a given product’s price goes up or its quality decreases. *See*
 23 Ex. 7 (Hendel, Igal, and Aviv Nevo, “Measuring the implications of sales and consumer inventory
 24 behavior.” *Econometrica* 74, no. 6 (2006) at p. 1637) (explaining short-term estimation results in
 25 significant mismeasurement of cross-price elasticity and substitution, and recognizing distinction
 26 between “long- and short-run price effects”). Indeed, in the ordinary course of their duties at the
 27 company, in-house economists at Facebook recognized that [REDACTED]

28 [REDACTED] Ex. 6 (PALM-003694642)

1 at -644. As one of those former Facebook in-house economists explained at deposition, this is because
 2 [REDACTED]

3 [REDACTED] Ex. 5 (Cunningham Tr.) at 79:24–80:16.

4 In the face of a short-run outage, rather than seek out a true substitute for the service that is
 5 temporarily unavailable, an individual may instead spend their time on any number of activities that
 6 are completely unrelated to the service that is out because they know the service will soon return. For
 7 example, when a person’s Xfinity internet service goes out for a few hours, they may read a book or
 8 cook salmon rather than incur the time and cost of replacing their Xfinity internet with Verizon
 9 internet. Similarly, when a person’s Southwest flight is late, they might grab coffee in the airport,
 10 rather than replace their flight with another on United. The same is true for personal social networks
 11 like Facebook and Instagram. When they are down for a few hours, it makes sense that a user would
 12 spend more time doing things other than incurring the time and effort of setting up or updating an
 13 account on Snapchat, convincing their friends and family to use Snapchat, and the like, as they know
 14 Facebook and Instagram will soon become available again.

15 Indeed, Dr. Carlton’s outage analysis shows that [REDACTED]
 16 [REDACTED]
 17 [REDACTED]

18 [REDACTED]. Carlton Table 9. Just as reading a book or cooking salmon is not a substitute for internet
 19 service, and grabbing coffee at the airport is not a substitute for a flight, all activities on the entire
 20 internet (via the Chrome web browser) and doing anything on a device (via the Samsung UI Home
 21 interface) are not substitutes for Facebook and Instagram. Dr. Carlton’s outage analysis should be
 22 excluded because it fails to reliably measure long-run substitution.

23 **2. Dr. Carlton’s *Cellophane* Fallacy Claims Are *Ipse Dixit***

24 Dr. Carlton’s outage analysis should also be excluded because it is subject to the *Cellophane*
 25 fallacy, which he fails to control for, and in response to which he offers only unsupported
 26 assumptions. The *Cellophane* fallacy is a well-established concept among economists that explains
 27 where a relevant market has already been monopolized, “using prevailing prices can lead to defining
 28 markets too broadly and thus inferring that dominance does not exist when, in fact, it does.” Ex. 9

1 (2023 Merger Guidelines, § 4.3 Market Definition) at pgs. 42–43 n.83. This is because where a firm
 2 has already monopolized the market for a product and then raises prices, consumers may, in the face
 3 of that price increase, turn to products that are not actually in the market, giving the false impression
 4 they are close substitutes, because “[a]t a high enough price, even poor substitutes look good to the
 5 consumer.” *United States v. Eastman Kodak Co.*, 63 F.3d 95, 105 (2d Cir. 1995).

6 Dr. Carlton considers the results of a Facebook outage—the equivalent of a temporary price
 7 increase—from the real world, where Facebook is an alleged monopolist. In this way, Dr. Carlton
 8 runs head-first into the *Cellophane* fallacy. Indeed, Consumers’ and Facebook’s experts, including
 9 Dr. Carlton, all recognize [REDACTED]

10 [REDACTED]

11 [REDACTED] Ex. 1 (Carlton Rep.) ¶¶ 113–14 [REDACTED]

12 [REDACTED]

13 [REDACTED]; Ex. 3 (List Rep.) ¶ 18. Tellingly, Dr. Carlton acknowledged [REDACTED]

14 [REDACTED]

15 [REDACTED] Ex.

16 2 (Carlton Tr.) at 249:17–250:3.

17 Despite acknowledging the *Cellophane* fallacy and its potential impact on the results of his
 18 outage analysis, Dr. Carlton’s [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 Ex. 2 (Carlton Tr.) at 249:17–250:3. In other words, whatever the actual diversion ratio numbers, Dr.
 24 Carlton [REDACTED]

25 [REDACTED]

26 [REDACTED] *Id.* at 252:21–254:2.

27 But Dr. Carlton conceded that [REDACTED]

28 [REDACTED] Ex. 2

1 (Carlton Tr.) at 250:20–251:5, 251:20–252:20. He also confirmed that [REDACTED]
 2 [REDACTED] *Id.* at 254:3–25.
 3 The Court should therefore exclude Dr. Carlton’s outage analysis because his explanation for why
 4 the *Cellophane* fallacy does not invalidate his outage analysis rests on an unsupported assumption.
 5 See *In re Google Play Store Antitrust Litig.*, 2023 WL 5532128, at *9 (N.D. Cal. Aug. 28, 2023)
 6 (Donato, J.) (excluding expert opinion where based on “wholly speculative assumptions”).

7 Moreover, even a cursory comparison of the diversion ratios that Dr. Carlton and Dr. List
 8 (Facebook’s other expert) calculate demonstrate that [REDACTED]
 9 [REDACTED]

10 [REDACTED] For example, while Dr. Carlton’s
 11 analysis—which is based on a Meta outage, which amounts to an infinite price increase—finds [REDACTED]
 12 [REDACTED] Dr. List’s pricing experiment—which is based on a more
 13 moderate (*i.e.*, large but not infinite) price increase—finds [REDACTED]

14 [REDACTED] *Compare* Ex. 1 (Carlton Rep.) Tables 9 & 10, *with* Ex. 3 (List Rep.) Table III-9. Contrary to
 15 Dr. Carlton’s *ipse dixit* assertion [REDACTED]

16 [REDACTED] (Ex. 2 (Carlton Tr.) at 252:17–20), [REDACTED]

17 [REDACTED] Dr. Carlton therefore has no basis for his
 18 assumption that [REDACTED]

19 **B. Dr. Carlton’s Opinions Regarding the Share of “Friends and Family” Time on**
Facebook Are Unreliable and Rely on Undisclosed Information

20 The Court should exclude Dr. Carlton’s opinion that “friends and family” sharing reflects a
 21 minority of how users spend their time on Facebook because it is based on data from Facebook whose
 22 reliability Dr. Carlton blindly accepted, [REDACTED]

23 Separately, Dr. Carlton’s opinion should be excluded because it relies on information that Facebook
 24 failed to disclose during fact discovery and in either of Dr. Carlton’s reports.

25 **1. Dr. Carlton Blindly Relies on Data that He Concedes Is Unreliable**

26 During deposition, Dr. Carlton for the first time revealed a number of irregularities regarding
 27 the data that he used to reach his opinions, including, for example:
 28

1 • [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 • [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 • [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED] Ex. 2 (Carlton Tr.) at 180:5–12, 183:13–
15 20, 187:7–18. That does not suffice to satisfy *Daubert*'s reliability requirements.
16 For one, Dr. Carlton's explanation that the two months of data he analyzed are somehow
17 reliable even though earlier months of data in the same data file are not does not hold water.
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED] Ex. 1
22 (Carlton Rep.) ¶ 88 n. 152; Ex. 2 (Carlton Tr.) at 174:22–175:9; *cf. In re TMI Litig.*, 193 F.3d 613,
23 697 (3d Cir. 1999) (“If the data underlying the expert's opinion are so unreliable that no reasonable
24 expert could base an opinion on them, the opinion resting on that data must be excluded.”).
25 Moreover, Dr. Carlton's assertion that the data he does analyze is reliable even though data
26 from other months in the same file is not is *ipse dixit*. He concedes [REDACTED]
27 [REDACTED]
28

1 [REDACTED]

2 • [REDACTED] Ex. 2 (Carlton Tr.) at 180:5–17 (emphasis added).

3 • [REDACTED] Ex. 2 (Carlton Tr.) at 180:5–17, 193:7–22

4 (emphasis added). Nor did [REDACTED]

5 [REDACTED] *Id.* at 183:21–184:4, 190:22–191:11.

6 • And as for [REDACTED] Ex. 2 (Carlton Tr.) at 197:12–19, 198:9–16 (emphasis added).

7 In the end, “[e]xperts are expected to verify the reliability of the data underlying their
 8 conclusions independently instead of simply adopting the representations of an interested party.” *Call*
 9 *Delivery Sys., LLC v. Morgan*, 2022 WL 1252412, at *1 (C.D. Cal. Mar. 7, 2022). Dr. Carlton
 10 concedes that he did zero independent verification of the reliability of the data he uses to form his
 11 opinion. Instead, he admits that he exclusively relies [REDACTED]
 12 His opinion must therefore be excluded. *See Baker v. Firstcom Music*, 2018 WL 2676636, at *2 (C.D.
 13 Cal. May 8, 2018) (excluding expert opinion as unreliable because expert “failed to verify the
 14 underlying data at the core of her expert opinion independently” and “appears to rely entirely on [her
 15 client’s] representations”).

16 **2. Dr. Carlton Relies on Information that Facebook Failed to Disclose**

17 Dr. Carlton’s “friends and family” minority usage opinion should also be excluded as a
 18 sanction under Rule 37 because it relies on information that Facebook failed to disclose in violation
 19 of Rule 26. Rule 26 requires disclosure of all “documents” and “electronically stored information . . .
 20 that the disclosing party has in its possession, custody, or control and may use to support its claims
 21 or defenses.” Fed. R. Civ. P. 26(a)(1)(A)(ii). Rule 37(c)(1) “forbid[s] the use at trial of any
 22 information required to be disclosed by Rule 26(a) that is not properly disclosed.” *Yeti by Molly, Ltd.*
 23 v. *Deckers Outdoor Corp.*, 259 F.3d 1101, 1106 (9th Cir. 2001). Dr. Carlton’s opinion relies on
 24 numerous pieces of information Facebook failed to disclose, and Facebook’s failure to disclose that
 25 information was and continues to be highly prejudicial to Consumers.

26 For example, Facebook during discovery failed to disclose the reliability issues regarding the
 27 data described *supra*. Those issues directly caused Dr. Carlton to make certain decisions regarding
 28

1 [REDACTED] And even
 2 though Dr. Carlton submitted two expert reports in this case—an opening report and a rebuttal
 3 report—and he [REDACTED] at the time he submitted his reports,
 4 these issues were not disclosed during discovery or in either of his reports. Ex. 2 (Carlton Tr.) at
 5 193:24–194:18.

6 In addition, Dr. Carlton testified that his opinion relies on understandings of the data—*e.g.*,
 7 what particular fields in the data mean and how to interpret them—[REDACTED]
 8 [REDACTED]
 9 [REDACTED]

10 [REDACTED]. *See* Ex. 2 (Carlton Tr.) at 161:20–162:1, 176:8–11, 177:6–177:12; *see also* 159:25–160:14
 11 & 163:22–167:7 [REDACTED]

12 [REDACTED]. Yet,
 13 these understandings were not disclosed during discovery or in either of his reports, which do not
 14 mention any [REDACTED] at all.

15 Dr. Carlton’s March 7, 2024 deposition—which came after the close of fact discovery, and
 16 after the parties’ exchange of expert reports—was the first time that Dr. Carlton and Facebook even
 17 hinted at these issues. [REDACTED]

18 [REDACTED] *See*,
 19 *e.g.*, Ex. 2 (Carlton Tr.) at 157:23–158:9, 158:24–159:4, 160:4–14, 164:10–22, 167:8–168:9, 176:20–
 20 177:1, 186:21–187:11 [REDACTED]

21 [REDACTED]
 22 [REDACTED] Facebook’s failure to disclose these issues was neither justified (it knew
 23 of these issues during discovery, and certainly by the time Dr. Carlton’s reports were served in
 24 January and February 2024), nor harmless. *See Yeti*, 259 F.3d at 1106–07 (noting that a party may
 25 avoid exclusion if it proves its failure to disclose “is substantially justified or harmless.”); *see also*
 26 Fed. R. Civ. P. 37(c)(1).

27 Had Consumers had the same access to information that Facebook provided to Dr. Carlton—
 28 [REDACTED]—Consumers and their experts could have made

1 additional use of the data that Facebook produced in this litigation. Instead, [REDACTED]
 2 [REDACTED]
 3 [REDACTED] Facebook stonewalled Consumers' requests for information regarding Facebook's data.
 4 Similarly, had Facebook [REDACTED]

5 Consumers could have undertaken their own further investigation into those issues and further
 6 challenged Dr. Carlton's decisions and analyses of the data in Consumers' own expert reports.
 7 Facebook prevented that by engaging in gamesmanship.

8 Facebook's failure to disclose these issues makes exclusion of Dr. Carlton's opinion the only
 9 appropriate remedy. *Bentley v. ConocoPhillips Pipeline Co.*, 2010 WL 11537799, at *8 (D. Mont.
 10 Feb. 3, 2010) (explaining that “[t]here is no justification to handing over documents to an expert but
 11 omitting to hand them over to the other side,” and excluding expert testimony since party “gam[ed]
 12 the system” and “gained an advantage by allowing its expert to rely on things that [opposing party]
 13 did not have but should have.”).

14 **C. Dr. Carlton's Opinions Regarding the Inclusion of Particular Products in the**
Relevant Market and His Resulting Share Calculations Should Be Excluded

15 The Court should exclude Dr. Carlton's opinion that certain products must be included in the
 16 relevant market if Snapchat is, and his resulting market share calculations, because they depend on
 17 diversion ratios from Dr. Carlton's outage analysis and from Dr. List's analyses, which themselves
 18 should be excluded. Moreover, Dr. Carlton's opinion is based on his selective and unreliable
 19 application of the Circle Principle—a methodology that has been rejected.

20 **1. Dr. Carlton Relies on His Own Outage Analysis and on Dr. List's**
Analyses, All of Which Should Be Excluded

21 Dr. Carlton's opinion that TikTok, Twitter, YouTube, and messaging services must be
 22 included in the relevant market if Snapchat is also in the market, as well as his resulting market share
 23 calculations, should be excluded because they rely on the diversion ratios that he obtained from his
 24 outage analysis, as well as on Dr. List's analyses. Ex. 1 (Carlton Rep.) ¶¶ 125, 144–45. As explained
 25 *supra*, Dr. Carlton's outage analysis should be excluded. And as explained in Consumers'
 26 concurrently-filed motion to exclude Dr. List's testimony, Dr. List's pricing experiment, switching
 27 analysis, and India ban opinions should be excluded too. Dr. Carlton's opinion and resulting share
 28 analysis, and India ban opinions should be excluded too. Dr. Carlton's opinion and resulting share

1 calculations, which rely on these analyses, should therefore be excluded as well.

2 **2. Dr. Carlton Selectively Relies on the Rejected “Circle Principle”**

3 Dr. Carlton’s opinion that TikTok, Twitter, YouTube, and messaging services must be
 4 included in the relevant market if Snapchat is also in the market should separately be excluded
 5 because it relies on the rejected Circle Principle. *See* Ex. 1 (Carlton Rep.) ¶¶ 9, 115, 121, 125; *see*
 6 *also* Ex. 2 (Carlton Tr.) at 17:4–7, 58:10–25. The Circle Principle states, “[w]hen applying the
 7 hypothetical monopolist test to define a market around a product offered by one of the merging firms,
 8 if the market includes a second product, the Agencies will normally also include a third product if
 9 that third product is a closer substitute for the first product than is the second product.”³ Ex. 8 (2010
 10 U.S. Department of Justice and the Federal Trade Commission Horizontal Merger Guidelines
 11 (“Merger Guidelines”), § 4.1.1 The Hypothetical Monopolist Test) at p. 9. This is true even if the first
 12 and second products together satisfy the hypothetical monopolist test. *Id.* (Example 6). Dr. Carlton
 13 explains the methodology—also referred to as “algorithmic” market definition—as follows: [REDACTED]

14 [REDACTED]
 15 [REDACTED] Ex. 2 (Carlton Tr.) at 58:10–25.

16 For purposes of this case, Dr. Carlton explains [REDACTED]
 17 [REDACTED]
 18 [REDACTED]

19 [REDACTED] Ex. 2 (Carlton Tr.) at 17:5–7; Ex. 1 (Carlton Rep.) ¶ 121. There are several problems with
 20 Dr. Carlton’s opinions that render them inadmissible.

21 *First*, Dr. Carlton’s Circle Principle approach provides no basis for [REDACTED]

22 [REDACTED] Dr. Carlton’s Circle
 23 Principle approach relies on calculating diversion ratios of various products, rank ordering them, and
 24 then including in the relevant market those that have higher diversion ratios than does Snapchat. But
 25 as to iMessage, Dr. Carlton [REDACTED]
 26

27 ³ The hypothetical monopolist test “asks whether eliminating the competition among the group of
 28 products by combining them under the control of a hypothetical monopolist likely would lead to a
 worsening of terms of customers.” Ex. 9 (2023 Merger Guidelines, § 4.3.A The Hypothetical
 Monopolist Test) at p. 41.

1 [REDACTED] Dr. Carlton contends that
 2 [REDACTED]
 3 [REDACTED]
 4 [REDACTED] Ex. 1 (Carlton Rep.) ¶ 120; Ex. 3 (List Rep.) ¶¶ 64-65, 162. iMessage is not available
 5 on Android; it is only available on Apple iOS. So, [REDACTED]
 6 [REDACTED]. And as to YouTube, a video
 7 streaming service, Dr. Carlton [REDACTED]
 8 [REDACTED] Ex. 1 (Carlton Rep.)
 9 ¶ 153. A product in an “adjacent” market necessarily should not be included in the relevant market.

10 **Second**, the Circle Principle is an approach to market definition that has been rejected. It was
 11 reflected in the 2010 Merger Guidelines promulgated by the FTC and DOJ Antitrust Division. *See*
 12 Ex. 8 (2010 Merger Guidelines, § 4.1.1 The Hypothetical Monopolist Test) at p. 9. However,
 13 economists have grown skeptical of the Circle Principle—so much so, that the 2023 Merger
 14 Guidelines issued by the FTC and DOJ Antitrust Division do not mention it at all. Instead, the 2023
 15 Merger Guidelines make clear that “[t]here may be effective competition among a narrow group of
 16 products, . . . making the narrow group a relevant market, even if competitive constraints from
 17 significant substitutes are outside the group.” Ex. 9 (2023 Merger Guidelines, § 4.3 Market
 18 Definition) at p. 40. In other words, a group of products—say A, D, and E—can correctly constitute
 19 a relevant market by themselves, even if B and C are closer substitutes to A than D and E. *See Id.* at
 20 p. 40 (“The loss of both the competition between the narrow group of products and the significant
 21 substitutes outside that group may be even more harmful, but that does not prevent the narrow group
 22 from being a market in its own right.”); *see also United States v. Aetna Inc.*, 240 F. Supp. 3d 1, 37–
 23 40 (D.D.C. 2017) (rejecting Circle Principle).

24 Dr. Carlton provides no support for his opinion, premised on the Circle Principle, that if
 25 [REDACTED]
 26 [REDACTED]. At deposition, Dr. Carlton stated [REDACTED]
 27 [REDACTED] Ex. 2 (Carlton Tr.) at 61:3–14. But he, for example, cites zero literature in
 28 support of his assertion. Expert opinions that amount to “*ipse dixit*” are subject to exclusion. *See*

1 *Google Play*, 2023 WL 5532128, at *9. And beyond being unsupported, another of Facebook's own
 2 economist experts, Dr. List, testified that the Circle Principle is [REDACTED]. Ex. 4 (List Tr.) at 87:24–92:12
 3 [REDACTED]
 4 [REDACTED]
 5 [REDACTED] (emphasis added).

6 Indeed, after being confronted with the substance of Dr. List's testimony, Dr. Carlton [REDACTED]
 7 [REDACTED]
 8 [REDACTED]
 9 [REDACTED]
 10 [REDACTED] Ex. 2 (Carlton Tr.) at 69:23–70:17, 71:18–25, 80:19–81:13. To the extent Dr. Carlton has
 11 not disavowed his opinions based on the Circle Principle, those opinions should be excluded.

12 **Finally**, Dr. Carlton's cherry-picking of results from his own analysis is a telling recognition
 13 of the Circle Principle's unreliability. He opines that YouTube, TikTok, Twitter, iMessage, Google
 14 Messages, and two of Meta's other apps—Messenger and WhatsApp—should be included in the
 15 relevant market if Snapchat is based on [REDACTED] Ex. 1 (Carlton Rep.) ¶¶
 16 144–45. However, the one analysis he performed, based on the October 2021 service outage, reported
 17 [REDACTED]

18 Under Dr. Carlton's own Circle Principle methodology, then, [REDACTED]
 19 [REDACTED]
 20 [REDACTED]
 21 [REDACTED] Yet, Dr.
 22 Carlton's report [REDACTED]
 23 [REDACTED] *See Id.*, Carlton Tables 10 & 11.

24 When confronted with this inconsistency at deposition, Dr. Carlton reversed course, stating
 25 [REDACTED]
 26 [REDACTED]
 27 [REDACTED] Ex. 2 (Carlton Tr.) at 93:4–95:16, 216:19–217:3. In other words, he would want
 28 to analyze the use case, not just the diversion ratio, for the product. That is a telling admission that

1 shows the unreliability of Dr. Carlton's Circle Principle methodology— [REDACTED]
 2 [REDACTED]
 3 [REDACTED] It also confirms that Dr. Carlton applied his own methodology inconsistently to [REDACTED]
 4 [REDACTED]
 5 [REDACTED] and provides a separate basis for exclusion. *See Amorgianos v. Nat'l R.R. Passenger Corp.*,
 6 303 F.3d 256, 268 (2d Cir. 2002) (exclusion proper where expert “failed to apply his own
 7 methodology reliably”); *Deficcio v. Winnebago Indus., Inc.*, 2014 WL 4211274, at *6 (D.N.J. Aug.
 8 25, 2014) (excluding expert opinion because expert “did not follow his own methodology”).

9 **D. Dr. Carlton's Opinion that Competition May [REDACTED]
 10 Is Contrary to Decades of Law**

11 Dr. Carlton's opinions that competition [REDACTED]
 12 should be excluded as contrary to law. The Supreme Court has long recognized that “competition is
 13 the best method of allocating resources” and “ultimately competition will produce not only lower
 14 prices, but also better goods and services.” *Nat'l Soc. of Pro. Eng'rs v. United States*, 435 U.S. 679,
 15 695 (1978). It is thus well-settled that the Sherman Act “precludes inquiry into the question whether
 16 competition is good or bad.” *Nat'l Collegiate Athletic Ass'n v. Alston*, 594 U.S. 69, 95 (2021). Dr.
 17 Carlton's opinion is a poorly disguised assertion that “competition is bad.” His opinion is therefore
 18 not only unhelpful to the fact finder, it is forbidden and must be excluded. *See United Food & Com.*
 19 *Workers Loc. 1776 v. Teikoku Pharma USA*, 296 F. Supp. 3d 1142, 1183 (N.D. Cal. 2017) (expert
 20 opinions that are “contrary to the law” may be excluded “through the *Daubert* process.”).

21 **V. CONCLUSION**

22 Consumers respectfully request that the Court exclude Dr. Carlton's opinions regarding: (1)
 23 the October 2021 outage; (2) “friends and family” minority usage; (3) particular products that Dr.
 24 Carlton claims must be included in the relevant market, as well as his resulting market share
 25 calculations, and (4) competition [REDACTED]
 26
 27
 28

1 DATED: April 28, 2025

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1 **ATTESTATION OF KEVIN Y. TERUYA**

2 This document is being filed through the Electronic Case Filing (ECF) system by attorney
3 Kevin Y. Teruya. By his signature, Mr. Teruya attests that he has obtained concurrence in the filing
4 of this document from each of the attorneys identified on the caption page and in the above signature
5 block.

6 Dated: April 28, 2025

7 By */s/ Kevin Y. Teruya*
Kevin Y. Teruya

8
9 **CERTIFICATE OF SERVICE**

10 I hereby certify that on this 28th day of April 2025, I electronically transmitted the foregoing
11 document to the Clerk's Office using the CM/ECF System, causing it to be electronically served on
12 all attorneys of record.

13
14 By */s/ Kevin Y. Teruya*
Kevin Y. Teruya